

Water Consumption Report

Period: Jan 2025 to Dec 2025

1. Introduction

Woxsen University is committed to efficient water management and sustainability. As per the National Building Code (NBC) of India, 2016 & Bureau of Indian Standards for educational institutions with boarding facilities, the daily water consumption per person is estimated at 135 liters. However, Woxsen University has successfully reduced its freshwater consumption by utilizing treated water for various activities wherever possible. This report outlines the detailed water consumption breakdown and sewage treatment strategies at the university.

2. Daily Water Consumption Breakdown (Per Person)

Activity	Liters per Day	Percentage of Daily Usage
Drinking	5 L	4.3%
Cooking & Utensils Cleaning	15 L	13.0%
Bathing	55 L	47.8%
Washing	20 L	17.4%
Academic Activities (Cleaning & Gardening)	10 L	8.7%
Toilet (Sanitation)	10 L	8.7%
Total Water Consumption	115 L	100%

Note: 35% of treated water is used for flushing. Gardening water is not considered in the breakdown as treated water is used for gardening. If we consider only freshwater consumption, it is approximately 70-80 Liters per person per day.

3. Total Monthly Water Consumption

Assumptions:

- **Population: 6,100**(students, faculty, and staff)
- **Average month length:** 30 days

Daily Water Usage for the Entire University:

$$6,100 \times 115 \text{ L} = 7,01,500 \text{ Liters/day}$$

Monthly Water Usage:

$$7,01,500 \times 30 = 2,10,45,000 \text{ Liters/month}$$

4. Sewage Treatment and Recycling Process

(From bathing, washing, sanitation, and other domestic uses)

- 95 L/person/day × 6,100 persons
- Daily Wastewater Generated: 5,79,500 Liters
- Monthly Wastewater Generated: 1,73,85,000 Liters

Sewage Treatment Capacity:

- 250 KLD (KILO LITERS PER DAY) ECO STP
- 300 KLD (KILO LITERS PER DAY) Sintex STP
- 300 KLD (KILO LITERS PER DAY) Sintex STP

STP Under Development

- 300 KLD – Sintex STP (Under Construction)

Total Capacity: 850 KLD (KILO LITERS PER DAY)

This enhanced capacity ensures adequate treatment for current demand and future campus expansion.

Recycled Water Usage:

Usage	% of Treated Water	Quantity (Liters/Month)
Gardening	65%	1,13,00,250
Flushing	35%	60,84,750
Total Reused Water	100%	1,73,85,000

ECO STP Images:





Sintex STP's Images:





5. Conclusion

Woxsen University has implemented a robust and sustainable water management system. With a controlled per-person consumption of **115 liters per day**, effective reuse of treated wastewater, and an upgraded STP capacity reaching **850 KLD**, the University ensures responsible water usage and long-term sustainability.

The commissioning of an additional **300 KLD Sintex STP** and the development of another **300 KLD facility** further reinforce Woxsen University's commitment to environmental stewardship and resource optimization.